

3.1 Subgrade Soil

Three fine-grained Piedmont residual soils were chosen for this laboratory testing program and were obtained from sites in Davidson County, NC. Figure 3.1 shows the grain size distribution of the test soils.

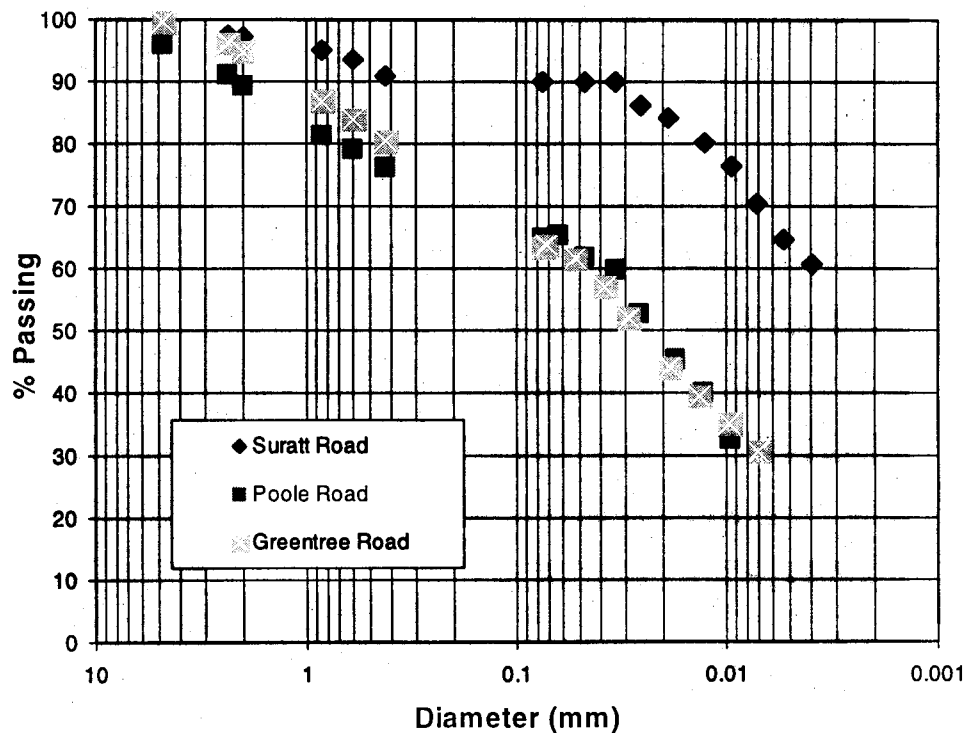


Figure 3.1 Grain Size Distribution of the Test Soils

The Piedmont region of North Carolina from which soil samples were retrieved lies between the Blue Ridge mountains and the Coastal Plain region. The test soils were clay of residual origin. These soil samples were taken from sites that will be referred to as Surratt Road, Poole Road, and Greentree Road. The residual clay at the three test sites was formed by the chemical weathering of the in-place rock, leaving behind a soil with similar structure to that of the parent material. The Poole Road and Greentree Road test sites are 5 km (3 mi.) apart. Both lie on the border between the Charlotte Belt and the Carolina Slate Belt geologic regions. Surratt Rd site is on the southern end of Davidson